

C L A I M S

1.       An optical fiber anchor device installed in a terminal connecting device for connecting an optical cable having a loose tube type unit in which a single optical fiber or a plurality of optical fibers is or are inserted in a cylindrical tube made of a metal or synthetic resin together with a jelly-like filler and used for anchoring the single optical fiber or the plurality of optical fibers inserted in said optical cable, comprising; a hot-melt type bonding agent in a form of a tube having a hollow portion; and a heat-shrinkable tube in a form of a tube having a hollow portion, wherein said hot-melt type bonding agent is inserted into said hollow portion of said heat-shrinkable tube, at least one of said optical fibers is inserted into said hollow portion of said hot-melt type bonding agent and heated, an anchor portion is formed by melting said hot-melt type bonding agent and shrinking said heat-shrinkable tube so as to be integrated with said optical fiber and an end of said anchor portion is held by a fixed portion of said terminal connecting device, whereby said optical fiber is anchored.

2.       An optical fiber anchor device installed in a

terminal connecting device for connecting an optical cable having a loose tube type unit in which a single optical fiber or a plurality of optical fibers is or are inserted into a cylindrical tube made of a metal or synthetic resin together with a jelly-like filler and used for anchoring the single optical fiber or the plurality of optical fibers inserted in said optical cable, comprising; a hot-melt type bonding agent in a form of a tube having a hollow portion; a heat-shrinkable tube in a form of a tube having a hollow portion; and a support rod, wherein said hot-melt type bonding agent is inserted into the hollow portion of said heat-shrinkable tube, said support rod is disposed on said hollow portion, a solid portion or an outer circumferential portion of said hot-melt type bonding agent, at least one of said optical fibers is inserted into said hollow portion of said hot-melt type bonding agent and heated, an anchor portion is formed by melting said hot-melt type bonding agent and shrinking said heat-shrinkable tube so as to be integrated with said support rod and said optical fiber, and an end of said support rod is held by a fixed portion of said terminal connecting device, whereby said optical fiber is anchored.

3. The optical fiber anchor device according to

claim 1 or 2, wherein said anchor portion has a length of 30 to 100 mm.

4. The optical fiber anchor device according to claim 1 or 2, wherein said hot-melt type bonding agent is preliminarily inserted into said hollow portion of said heat-shrinkable tube and said hot-melt type bonding agent is joined integrally with said heat-shrinkable tube.

5. The optical fiber anchor device according to claim 2, wherein said support rod is preliminarily fixed to the solid portion of said hot-melt type bonding agent.

6. The optical fiber anchor device according to claim 2, wherein said hot-melt type bonding agent is preliminarily applied to an outer circumferential portion of said support rod.

7. The optical fiber anchor device according to claim 2, wherein a support sleeve is fixed to an end of said support rod which is to be fixed to said terminal connecting device and said support rod is held by said terminal connecting device by way of said support sleeve.

8. The optical fiber anchor device according to

claim 2, wherein concavities and convexities are formed on an outer circumferential surface of a portion of said support rod which is to be fixed to said hot-melt type bonding agent.